

# ENDANGERED

## Rare and Uncommon WILDFLOWERS

Found on the Southern National Forests



U. S. DEPT. OF AGRICULTURE  
FOREST SERVICE • SOUTHERN REGION

## INTRODUCTION

The National Forests provide a wide variety of habitats in which wildflowers may grow. Although no formal count has ever been made there are probably over 5,000 species of flowering plants in the Southern National Forests, many of which occur only in the South.

The wildflowers included in this booklet are herbaceous and have conspicuous flowers or flower clusters. Common names are provided. There is no standardization of common names and they often vary from one section to another, so some of these listed may be confusing. However the accompanying scientific names will allow accurate reference to botanical manuals where more detailed information may be found.

The short descriptions will give some idea of the appearance of individuals of each species. It will be necessary to refer to botanical manuals to distinguish closely similar species.

The decision concerning abundance, habitat, and distribution of a given species is sometimes difficult. No one person has the necessary familiarity with the flora to state this information for the various species. We are glad to acknowledge the help of personnel associated with herbaria in state and/or private universities in the preparation of this booklet.

The rare species include those unlikely to be encountered on casual trips. A species that may be quite abundant where it does occur but is known in only a few localities is also considered as rare. Uncommon species are those whose abundance is intermediate to rare and common. The abundance given is for the South. Species may be more common elsewhere.

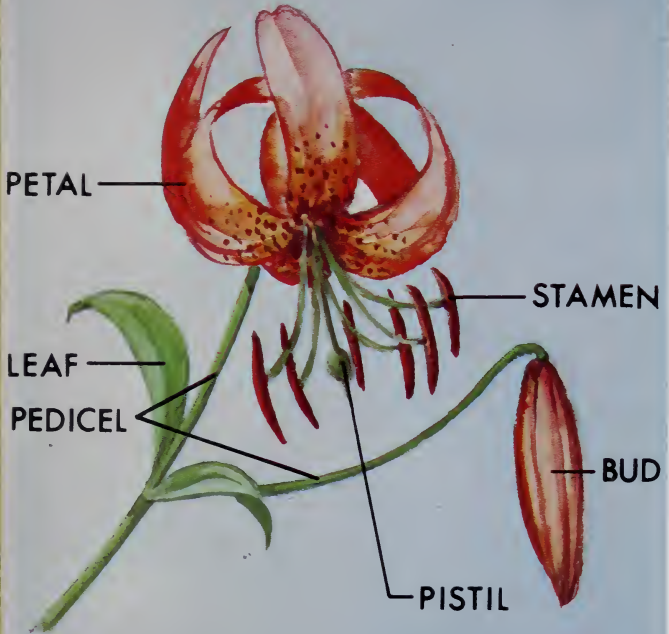
Some of the rare and uncommon species are endangered because of man's impact on their specific habitats. The Spider-lily and Purple Trumpet are among these. Other species, like the spectacular Turk's-cap Lily, are picked frequently, thereby endangering the species. Even those rare species not presently threatened can be lost because of the disappearance of the few places they grow.

No native wildflowers, and especially the less common ones, should be picked. The beauty that is taken today is one that will be missed tomorrow.



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# FLOWER TERMINOLOGY



## TURK'S-CAP LILY

*Lilium superbum*

Plants to 9 feet tall. Leaves whorled. Often with 20 or more orange to reddish, nodding flowers. Uncommon. Moist mountain meadows and woods. Georgia, Alabama, and northward.



## WHITE ARUM

*Peltandra sagittaeifolia*

Arrow-shaped leaves. White sheath around flowers. Rare. Coastal Plain swamps. North Carolina to Mississippi.

## PINK LADY-SLIPPER

*Cypripedium acaule*

Leaves two, accordion folded, basal. Flower a pink moccasin about 2 inches long. Uncommon. Bogs and acid woods, mostly in the mountains. Alabama to South Carolina and northward.

*Pink Lady-Slipper*







## UMBRELLA-LEAF

*Diphylleia cymosa*

Plants to 3 feet tall. Leaves usually two, large, peltate. Flowers in a cluster above leaves, petals white. Uncommon. Moist areas in mountain woods. Georgia to Virginia.

## SHORTIA

*Shortia galacifolia*

Leaves basal, evergreen, mostly oblong and pinnately veined. Flowers to 1 inch long, bell-shaped, the petals white to pink and appearing separate. Rare. Rich woods. Georgia, South Carolina, and North Carolina.

*Shortia*



**Squirrel Corn**



**Large Twayblade**



## SQUIRREL CORN

*Dicentra canadensis*

Plants from a short bulblet-bearing rootstock. Leaves dissected, basal. Flowers on a leafless stem, nodding, mostly white, rarely pink. Uncommon. Moist woods. Georgia mountains and northward.

## LARGE TWAYBLADE

*Liparis lilifolia*

A small plant. Leaves two, basal, broad. Flowers five or more, small, purplish, and inconspicuous. Uncommon. Usually in humus of moist mountain woods. Alabama to South Carolina and northward.



Grass - of - Parnassia



## GRASS-OF-PARNASSIA *Parnassia asarifolia*

Plants to 20 inches tall. Leaves mostly basal, leathery, entire, cordate. Flowers on long stalks above leaves, the petals short-stalked, white, and with conspicuous veins. Uncommon. Moist places in woods or in open. Georgia, Alabama, and north to West Virginia and Virginia.



**Blue Bells**



**Pachysandra**

# BLUE BELLS

*Mertensia virginica*

Plant to 2 feet tall, stems branched. Leaves mostly elliptic. Flowers showy, the corolla funnellform and blue. Rich woods, moist soil. Uncommon. Alabama, Northwest Georgia, Tennessee, North Carolina, and northward; also Arkansas to Kansas.

## Rosebud Orchid



# ROSEBUD ORCHID

*Cliestes divaricata*

1.5-2.5 feet tall. Leaf one, above middle of stem. Flower showy, white and brown, about 2 inches long. Uncommon. Moist woods and open areas of mountains and Coastal Plain. Florida to East Texas, north to Tennessee and Delaware.

# PACHYSANDRA

*Pachysandra procumbens*

Plants to 12 inches tall. Leaves evergreen, mottled, clustered near end of erect stem. Flowers small, in spikes from lower part of stem. Very rare. Rich woods in widely scattered localities. West Florida to Louisiana and north to Kentucky.

**Hairy Bush-Pea**



**Kidney Leaf Twayblade**



## HAIRY BUSH-PEA

*Thermopsis villosa*

Plants to 5 feet tall. Sparingly branched. Leaves with 3 leaflets. Flowers on ascending pedicels of terminal racemes, the petals yellow. Fruits conspicuously and densely hairy. Uncommon. Open woods in mountains. Georgia, Alabama, Tennessee, and North Carolina.

## KIDNEY LEAF TWAYBLADE

*Listera smallii*

A small plant. Leaves two, opposite, midway of stem. Flowers delicate, yellowish or whitish green. Rare. Moist places in dense mountain woods or thickets. Georgia, South Carolina, and north to West Virginia and Maryland.





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STAMP

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Atlanta, Georgia 30309



## LILY OF THE VALLEY

*Convallaria majalis*

Two or three basal leaves. Flowers on a short arching stem, bell-shaped, nodding, white, fragrant. Rare. Mountain woods. Georgia, North Carolina, Tennessee, Virginia, and West Virginia.

## Purple Coneflower



## PURPLE CONEFLOWER

*Echinacea purpurea*

One to five feet tall. Leaves somewhat oval-shaped, rather rough on upper side. Rays 1-2 inches long, fairly broad, and darkish purple. Uncommon. Generally in better soils. Western North Carolina and north Georgia, north to Virginia, Kentucky, and Missouri.

*Shooting Star*







## SPIDER LILY

*Hymenocallis occidentalis*

Bulbous. Leaves basal, grass-like, broad, long. Flowers 1-7 on a leafless stalk. Sepals and petals white, long, narrow. Stamens united by a conspicuous white web. Uncommon. In rocky streams and moist areas along them. Florida to Mississippi and northward.

## SHOOTING STAR

*Dodecatheon media*

Leaves basal to 10 inches long. Flowers ascending, spreading, and drooping from top of leafless stem to 20 inches tall. Petals white to pink. Uncommon. Rich woods. East Texas to South Carolina, and north to Wisconsin and West Pennsylvania.

**Mountain Cinquefoil**



**Mottled Trillium**



## MOUNTAIN CINQUEFOIL

*Potentilla tridentata*

Plants usually under 6 inches tall. Leaves evergreen, with three leaflets three-notched. Petals white. Uncommon. Rock crevices and exposed summits and ridges of mountains. Georgia and northward.

## MOTTLED TRILLIUM

*Trillium discolor*

Three mottled leaves at top of stem. Flowers sessile, with cream to pale yellow spatulate petals. Rare. Wooded slopes. Mostly in upper half of Savannah River drainage system.

# OTHER RARE WILDFLOWERS

## LILY-LEAF SEDGE

*Cymophyllus fraseri*

Leaves grass-like, broad. Stalked white spikes of male and female flowers. Uncommon. Rich woods. Mountains of North Carolina, Tennessee, Virginia, and West Virginia.

## HARPEROCALLIS

*Harperocallis flava*

Stem to 22 inches tall. Leaves mostly basal, about one-eighth inch wide and to 8 inches long. Flower solitary. Perianth yellow above and greenish beneath, spreading, persistent. Very rare. In and at edge of open bog. Known only at a small area in the Apalachicola National Forest.

## SWAMP PINK

*Helonais bullata*

Leaves elongate, broad, evergreen, mostly basal. Flowers pink, in a dense cluster about a foot from the ground. Rare. Bogs. Georgia and North Carolina mountains to New York.

## NOLINA

*Nolina atrocarpa*

Leaves numerous, long, narrow, mostly basal. Flowers on branched or unbranched upper part of a stem 2-5 feet tall. Rare. Pinelands in and near Apalachicola National Forest and near East coast of Florida.

## NARROW-PETALED TRILLIUM

*Trillium lanceolatum*

Leaves narrowly elliptic. Petals narrow, purple to maroon. Sepals reflexed. Uncommon. Moist woods. South Carolina, Georgia, West Florida, Alabama and Tennessee.

## QUEEN LADY'S-SLIPPER

*Cypripedium reginae*

Leaves several on a stem 1.5 to 2.5 feet tall. Flower white and magenta to rose. Rare. Wooded swamps and bogs. Georgia, Tennessee, North Carolina, West Virginia, and other northern states.

## HEART-LEAF

*Hexastylis heterophylla*

Leaves basal, cordate, evergreen. Flowers axillary, fleshy, often under litter, the corolla absent, the calyx with a bell-shaped tube. Uncommon. Rich mountain woods. Georgia, Tennessee, South Carolina, and north to West Virginia.

## CAMPION

*Silene ovata*

Plants to 4 feet tall. Leaves opposite. Flowers mostly in a terminal cluster, the petals white and deeply cleft. Uncommon. Rich woods. North Carolina to north Mississippi and north to Virginia and Kentucky. Also in Arkansas.

## GOLDEN-SEAL

*Hydrastis canadensis*

Plants to 18 inches tall. Leaves palmately lobed, one basal and two near top of stem. Flower one, white, above leaves, with many stamens. Rare. Rich woods. Tennessee and North Carolina mountains and northward.

## MONKSHOOD

*Aconitum reclinatum*

Weak-stemmed. Leaves palmately lobed. Flowers yellow with one sepal shaped like hood. Rare. Rich mountain woods. Georgia, North Carolina, Virginia, and West Virginia.

## CLIMBING FUMITORY

*Adlumia fungosa*

Slender vine. Leaves dissected. Flowers usually pink, in drooping clusters. Rare. Moist and usually rocky places in rich woods. North Carolina and Tennessee mountains and northward.

## PALE CORYDALIS

*Corydalis sempervirens*

A glaucous, branched biennial. Leaves dissected. Flowers in small clusters, the corolla usually pink, with a yellow tip. Uncommon. Usually in rocky places in open woods. Georgia and North Carolina mountains and northward.

## PEPPER-ROOT

*Dentaria multifida*

Plants to one foot tall, from white horizontal tubers. One or two dissected basal leaves and two smaller ones above the middle of the stem. Flowers white, few. Uncommon. Moist areas in woods. North Alabama and north-west Georgia to south Indiana.

## OZARK SAXIFRAGE

*Saxifraga palmeri*

Leaves basal, mostly entire. Flowers at first close, later in an open panicle, the petals white. Rare. Moist shaded rocks. In and near Ozark and Ouachita National Forests, and Oklahoma.

## COASTAL PARNASSIA

*Parnassia caroliniana*

Plants to 20 inches tall. Similar to grass-of-Parnassus except that the leaves are rounded at the base; flower petals not stalked. Rare. Open and wooded swamps of the Coastal Plain. North Carolina to Florida and Mississippi.

## PURPLE TRUMPET

*Sarracenia leucophylla*

Leaves tapering tubes to 4 feet tall, basal, the top portion partly or almost entirely white except for purple veins. Flowers red. Uncommon. Open wet places. Southwest Georgia (Now extinct) and northwest Florida to south Mississippi.

## PITCHER-PLANT

*Sarracenia purpurea*

Leaves basal, lying down, hollow with a broad lip. Flower on a leafless stalk to 1.5 feet tall, the petals maroon. Uncommon. Bogs and moist flats. Florida to Mississippi and northward.

## BUSH-PEA

*Thermopsis fraxinifolia*

Plants to 3 feet tall. Similar to hairy bush-pea; except that flowers and fruits not strongly ascending; fruits not conspicuously hairy. Uncommon. Dry, open woods, mostly in mountains. North Carolina, South Carolina, and Georgia.



## FRINGED POLYGALA

*Polygala pauciflora*

Plants to 6 inches tall. The few large leaves near the top. Flowers 1-4 among these leaves, pale pink or almost white, about one-half inch long. Rare. Mountain woods. Georgia, Tennessee, South Carolina, North Carolina, Virginia, and northward.

## AMERICAN DOG-VIOLET

*Viola conspersa*

Stems several, 6 inches or more tall. Leaf blades cordate. Flowers numerous, usually light blue-violet, the corolla with a spur at base. Uncommon. Moist wooded places. North Alabama, South Carolina, Tennessee, North Carolina, and northward.

## CUT-LEAF BLUE VIOLET

*Viola viarum*

Leaves basal, glabrous, dissected. Flowers several, the petals light purple. Rare. Wooded floodplains and river banks. Ouachita National Forest and north into east Nebraska and south Iowa.

## SWEET PINESAP

*Monotropsis odorata*

Plants tawny, or yellowish to reddish, to 4 inches tall. Leaves small and clasping. Flowers in a tight cluster along top of stem. Rare. Rich woods, usually in mountains. Alabama, Georgia, North Carolina, and north to Kentucky and Maryland.

## LOOSESTRIFE

*Lysimachia fraseri*

Plants to 5 feet tall, leaves in whorls of 3-5. Flowers in a terminal panicle, petals yellow. Rare. Open areas in mountains of Alabama, Georgia, South Carolina, North Carolina, and Tennessee.

## FRINGED GENTIAN

*Gentiana crinata*

Plants to 3 feet tall usually branched above. Leaves opposite. Flowers usually many but solitary on stalks to 4 inches long, the petals fringed, blue. Rare. Rich woods. Mountains of Georgia, North Carolina, and West Virginia, and northward.

## FLORIDA GENTIAN

*Gentiana pennelliana*

Stems weak, often lying down, usually unbranched. Leaves opposite, narrow, 1-veined. Flowers solitary, the corolla white with blue-green markings. Rare. Open, moist, sandy sites. Apalachicola National Forest and adjacent area. Florida.

## SWERTIA

*Swertia caroliniensis*

Stems to 9 feet tall, unbranched. Leaves whorled. Flowers many in the mostly leafless top portion of the plant. Petals 4, each with a large gland near the base. Rare. Woodlands. Louisiana to South Carolina and northward.

## MILKWEED

*Asclepias tomentosa*

Stems to 4 feet tall. Leaves opposite. Flowers in lax umbels. Petals greenish. Rare. Sandy pine-barrens. North Carolina to Florida and east Texas.

## MILKWEED

*Asclepias connivens*

Stems to 2 feet tall. Leaves oblong, opposite. Flowers in 2-6 umbels at top of stem. Corolla greenish, the hoods 3/8 inch tall. Uncommon. Low pine woods and barrens. South Georgia, north Florida, and south Alabama.

## MORNING-GLORY

*Ipomoea trichocarpa*

An annual vine. Leaves cordate, sometimes 3-lobed. Corolla pink to purple, campanulate, 1-2 inches long. Rare. Sandy soil, open areas. North Carolina to Florida and Texas.

## HAIRY BINDWEED

*Convolvulus sericatus*

Stem trailing or twining. Leaves ovate-lanceolate, hairy on both surfaces. Rare. Corolla white, about 2.5 inches long. Open mountain slopes. North Carolina, South Carolina, and Georgia.

## BROAD-LEAF PHLOX

*Phlox amplifolia*

Stems 1 to few, to 5 feet tall. Leaves ovate, to 12 inches long. Flowers in a terminal cluster, the corolla pale to dark pink. Uncommon. Open woods. Mountains of Georgia and northward.

## CREEPING PHLOX

*Phlox stolonifera*

Stems trailing, forming mats. Leaves spatulate to elliptic-lanceolate. Flowering sparingly. The corolla violet or purple. Uncommon. Deciduous woods. North South Carolina and Georgia, north to Ohio and Pennsylvania.

## HORSE-BALM

*Collinsonia tuberosa*

Plants to 30 inches tall. Leaves opposite, thin, ovate. Flowers in terminal clusters, the petals yellowish, quite irregular. Uncommon. Rich woods. North Carolina, and South Carolina to Mississippi.

## BEARD-TONGUE

*Penstemon smallii*

Plants to 2 feet tall. Leaves opposite, broadly lanceolate. Flowers in terminal clusters mixed with leaves at base, the corollas tubular, 2-lipped, mostly purple. Uncommon. Partly open woods. Mountains of Georgia, South Carolina, North Carolina, and Tennessee.

## CHAFF-SEED

*Schwalbea americana*

Stems to 30 inches tall, unbranched. Leaves alternate, entire, sessile, elongate, 3-veined. Corolla tubular, irregular, yellow, about 1-3 inches long. Rare. Open woods, sandy soil. Coastal Plain, North Carolina to Florida and Louisiana.

## BUTTERWORT

*Pinguicula primulifolia*

Leaves basal, oblong, rounded at the tip. Flowers 1 to a few, each on a stem to 6 inches long. Corolla lobes violet to white, the tube lemon-yellow, the spur yellow. Rare. Usually at the edge of running water. Apalachicola to DeSoto National Forests and adjacent areas.

## HORSE-GENTIAN

*Triosteum aurantiacum*

Erect unbranched, to 5 feet tall. Leaves opposite, entire, broadly to narrowly elliptic. Flowers in leaf axils; the corolla tubular, reddish, about 0.5 inch long. Fruit yellow. Uncommon. Rich soil, open woods, mountains of Georgia, Tennessee and North Carolina; and northward.

## PIEDMONT ASTER

*Aster commixtus*

One to several stems to 3 feet tall. Basal leaves ovate, long petioled, to 6 inches long, the upper leaves smaller. Flowers in 3-12 heads at top, the ray corollas lavender to white, disc corollas yellow. Rare. Wooded slopes and at their bases. South central North Carolina, central South Carolina, and adjacent Georgia.

## NARROW-LEAVED CONEFLOWER

*Echinacea pallida*

Stems to 4 feet tall, usually unbranched, hairy. Leaves narrow, longer near ground. Flowers in cone-shaped heads; the rays narrow, rose purple, to 3 inches long, the disc flowers accompanied by stiff, sharp-pointed bracts. Rare. Open, dry situations. West North Carolina, north Georgia, west to Texas and north to Minnesota and Saskatchewan.

## HAIRY CONEFLOWER

*Rudbeckia mollis*

Plants to 3 feet tall, densely pubescent, the stems branching. Leaves oblong, to 3 inches long. Flower heads several. Rays to 1.7 inches long, yellow. Disc corollas dark colored making a cone about 0.8 inch long. Rare. Open woods, sandy areas of Coastal Plain. Florida, Georgia, and adjacent South Carolina.

## SWAMP COREOPSIS

*Coreopsis gladiata*

Plants to 3 feet tall. The leaves entire, to 7 inches long and 3 inches wide near base; the upper ones smaller. Bracts around heads in two series. The ray flowers yellow, disc flowers reddish. Uncommon. Marshes and other wet open places. Coastal Plain from South Carolina to Florida and Mississippi, also northwest South Carolina and adjacent North Carolina.

## RUGEL'S RAGWORT

*Senecio rugelia*

Plants to 20 inches tall. Basal leaves ovate, to 6 inches long; the upper ones smaller. Flower heads few in a terminal cluster. Bracts surrounding the heads in one series. Ray corollas absent. Uncommon. In woods and openings at high elevations. Southwest North Carolina and east Tennessee.

## INDIAN-PLANTAIN

*Cacalia floridana*

Stems to 5 feet tall, unbranched except the upper flower-bearing part. Basal leaves ovate to elliptic to 8 inches long, the upper ones smaller. Flower heads with few flowers and one series of bracts, ligules absent. Uncommon. Pine-scrub oak, sandy uplands, dry flatwoods. Northeast and central Florida.

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# Flowers...

## PART OF YOUR NATIONAL FORESTS

The National Forests are managed under the Multiple Use system which calls for using the various forest resources in the combinations that will benefit the most people. Protecting rare and delicate wildflowers is part of this management.

Steps are taken to make sure wildflowers are not damaged or destroyed. For example, if it is necessary to build a road where rare wildflowers grow we cooperate with conservation groups such as the Wildlife Management Institute and garden clubs to replant the flowers in another location before road construction starts.

We need your help in locating and protecting these beauties of the forest. Please let us know if you see any of the flowers described in this booklet.

Civilization sometimes takes ruthless toll of beauty as it moves forward. The world has lost much that is beautiful in the name of progress.

The responsibility of protecting the beauty that is left belongs to all of us, especially on our public lands. Let's help each other to keep natural beauty a prominent part of the National Forest system.

*T. A. Schlapper*

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*Regional Forester*





